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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/068,370	02/06/2002	Frank Leymann	DE920000095US1	6140
25259	7590	04/07/2006	EXAMINER	
IBM CORPORATION 3039 CORNWALLIS RD. DEPT. T81 / B503, PO BOX 12195 REASEARCH TRIANGLE PARK, NC 27709			Deshpande, Kalyan K	
			ART UNIT	PAPER NUMBER
			3623	
DATE MAILED: 04/07/2006				

Please find below and/or attached an Office communication concerning this application or proceeding.

<b>Office Action Summary</b>	<b>Application No.</b> 10/068,370	<b>Applicant(s)</b> LEYMANN ET AL.	
	<b>Examiner</b> Kalyan K. Deshpande	<b>Art Unit</b> 3623	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

#### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

#### Status

- 1) ☒ Responsive to communication(s) filed on 06 February 2006.
- 2a) ☐ This action is FINAL. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

#### Disposition of Claims

- 4) ☒ Claim(s) 1-4 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-4 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

#### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 06 February 2002 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

#### Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

#### Attachment(s)

- |  |   |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)  | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)   | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)             |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)<br>Paper No(s)/Mail Date <u>7/23/04 &amp; 9/29/04</u> . | 6) <input type="checkbox"/> Other: _____  |

## **DETAILED ACTION**

### ***Introduction***

1. The following is a non-final office action in response to the communications received on February 6, 2002. Claims 1-4 are now pending in this application.

### ***Information Disclosure Statement***

2. The examiner has reviewed the patents and articles supplied in the Information Disclosure Statements (IDS) provided on July 23, 2004 and September 29, 2004.

### ***Claim Rejections - 35 USC § 103***

3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

4. Claims 1-4 are rejected under 35 U.S.C. 103(a) as being unpatentable over Goodridge et al. (U.S. Patent No. 5799297).

As per claim 1, Goodridge et al. teach:

A computerized method of providing selective command control within a Workflow Management System (WFMS), said WFMS including a model of a business process, the model defining process activities as the nodes of an graph, and process control flows as directed edges of the graph, said method comprising the steps of:

upon receipt an issued command directed to an instance of said process-model, determining whether the activity having current control is defined within a command

sphere comprising a sub-graph of said graph (see column 3 lines 44-48, column 4 lines 21-28, column 8 lines 1-14, and column 8 lines 34-67; where workflow activities are defined. A workflow designer can set rules and scripts to define workflow activities. The workflow engine dictates which activities are to be performed and in what order as defined by the designer. The workflow engine determines which activity in the workflow is to be performed and gathers the necessary information required to process this step. Workflow activities are the same as issued commands. The workflow layout comprises connections between activities and has sub-layouts for each sub-process. The sub-process layout is the same as the sub-graph.), and

where the activity having current control is defined with a command-sphere, determining whether the issued command is defined as permissible for the activity having current control (see column 8 lines 1-14 and column 8 lines 34-67; where the workflow engine determines which activity is to be performed. Activities are preformed in a predetermined sequence. ); and

executing said issued command, if it is defined in the command sphere as a permissible command (see column 8 lines 34-67; where the each activity in the workflow process is executed.).

Goodridge et al. fail to teach an arbitrary graph. Goodridge et al. teach the use of a directed graph and a process map (see column 4 lines 13-29). For the purposes of linear programming and display of the workflow, a directed graph is the same as an arbitrary graph. The advantage of using an arbitrary graph is that it facilitates the user's

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ability to follow the flow of data on the graph. It would have been obvious, at the time of the invention, for one of ordinary skill in the art to use an arbitrary graph in the Goodridge et al. system instead of a directed graph in order to facilitate the user's ability to follow the flow of data on the graph, which is a goal of Goodridge (see column 4 lines 1-6).

As per claim 2, Goodridge et al. fail to teach "where the issued command is not found to be defined as a permissible command, determining whether a substitute action is defined; and where a substitute action is defined, executing that substitute action. Goodridge et al. teach defining commands in a workflow management system and designing a workflow process model based on sequencing permissible activities. Limiting a workflow process to only permissible activities is the same as excluding impermissible activities. The advantages of determining and defining impermissible commands is to be able to trap exceptions and reroute the workflow back on track. It would have been obvious, at the time of the invention, for one of ordinary skill in the art incorporate the feature to determine and define impermissible commands to the Goodridge et al. system in order to trap exceptions and reroute workflow back on track, which is a goal of Goodridge et al. (see column 2 lines 19-35).

As per claim 3, Goodridge et al. teach:

A method according to either claim 1 or 2 wherein the command sphere is completely included within a second command sphere and said method includes the further step of using the definitions of the included command sphere if a conflict exists between the definitions of permissible actions in the two command spheres

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(see column 4 lines 14-67 and column 5 lines 1-48; where the system administrator sets forth organizational based rules for the performance of workflow steps. The user can determine instant specific rules for a specific instance. The defined rules for a specific instance govern over the rules determined by the system administrator.).

As per claim 4, Goodridge et al. teach:

A computerized method of providing selective command control within a WFMS according to claim 2 wherein said command-sphere overlaps a third command-sphere with the activity having current control being defined in both command spheres and wherein the method comprises the further step of executing the issued command only if the command is defined as permissible in both of the command spheres (see column 4 lines 14-67 and column 5 lines 1-48; where the system administrator sets forth organizational based rules for the performance of workflow steps. The user can determine instant specific rules for a specific instance. The defined rules for a specific instance govern over the rules determined by the system administrator. The administrator and the users define only permissible commands for the workflow.).

### ***Conclusion***

5. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. The following are pertinent to the current invention, though not relied upon:

Bostleman et al. (U.S. Patent No. 6850939) teaches a method for managing and selectively sharing multiples sets of information to be used in a plurality of projects is disclosed.

Randell (U.S. Patent No. 5826020) teaches a workflow system that automates the definition and execution of a procedure that can be carried out according to defined rules among agents.

Chatterjee et al. (U.S. Patent No. 5774661) teaches a system and method for automatically generating and controlling workflows that include a number of processes uses a workflow server computer and a client computer coupled to the workflow server by a network.

Akifuji et al. (U.S. Patent No. 6853974) teaches a workflow system capable of simultaneously executing a plurality of business processes.

Bacon et al. (U.S. Patent No. 6697784) teaches a workflow management system and method with personal subflows.

Basu et al. (Basu, Amit; Blanning, Robert W.; "A Formal Approach to Workflow Analysis", *Information Systems Research*, March 2000, pp. 17-36) teaches a method to implement workflow system by process redefinition and reengineering.


Kumar et al. (Kumar, Akhil; Zhao, J. Leon; "Dynamic Routing and Operational Controls in Workflow Management Systems", *Management Science*, February, 1999, pp. 253-272) teach dynamic routing and operational controls in workflow systems by providing more flexibility in process modeling, permitting rework on an ad hoc basis, and handling exceptions.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Kalyan K. Deshpande whose telephone number is (571) 272-5880. The examiner can normally be reached on M-F 8am-5pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Tariq Hafiz can be reached on (571) 272-6729. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

  
kkd

  
C. Michelle Tarae  
Patent Examiner  
Art Unit 3623